

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/578,401  
Source: TFWP  
Date Processed by STIC: 5-15-06

# ***ENTERED***



IFWP

**RAW SEQUENCE LISTING**

DATE: 05/15/2006

PATENT APPLICATION: US/10/578,401

TIME: 09:48:27

Input Set : A:\seq1st.txt

Output Set: N:\CRF4\05152006\J578401.raw

```

4 <110> APPLICANT: Long, Li
5      Luqman, Mohammad
6      Yabannavar, Asha
7      Zaror, Isabel
9 <120> TITLE OF INVENTION: Methods of Therapy for B Cell-Related
10     Cancers
12 <130> FILE REFERENCE: PP22244.002 (284270)
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/578,401
C--> 14 <141> CURRENT FILING DATE: 2006-05-03
14 <150> PRIOR APPLICATION NUMBER: 60/613,885
15 <151> PRIOR FILING DATE: 2004-09-28
17 <150> PRIOR APPLICATION NUMBER: 60/565,710
18 <151> PRIOR FILING DATE: 2004-04-27
20 <150> PRIOR APPLICATION NUMBER: 60/525,579
21 <151> PRIOR FILING DATE: 2003-11-26
23 <150> PRIOR APPLICATION NUMBER: 60/517,337
24 <151> PRIOR FILING DATE: 2003-11-04
26 <160> NUMBER OF SEQ ID NOS: 12
28 <170> SOFTWARE: FastSEQ for Windows Version 4.0
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 720
32 <212> TYPE: DNA
33 <213> ORGANISM: Artificial Sequence
35 <220> FEATURE:
36 <223> OTHER INFORMATION: Coding sequence for light chain of CHIR-12.12
37     human anti-CD40 antibody
W--> 40 <221> NAME/KEY: CDS
41 <222> LOCATION: (1)...(720)
W--> 43 <400> 1
44 atg gcg ctc cct gct cag ctc ctg ggg ctg cta atg ctc tgg gtc tct   48
45 Met Ala Leu Pro Ala Gln Leu Leu Gly Leu Leu Met Leu Trp Val Ser
46 1          5          10          15
48 gga tcc agt ggg gat att gtg atg act cag tct cca ctc tcc ctg acc   96
49 Gly Ser Ser Gly Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Thr
50          20          25          30
52 gtc acc cct gga gag ccg gcc tcc atc tcc tgc agg tcc agt cag agc   144
53 Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser
54          35          40          45
56 ctc ctg tat agt aat gga tac aac tat ttg gat tgg tac ctg cag aag   192
57 Leu Leu Tyr Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys
58          50          55          60
60 cca ggg cag tct cca cag gtc ctg atc tct ttg ggt tct aat cgg gcc   240
61 Pro Gly Gln Ser Pro Gln Val Leu Ile Ser Leu Gly Ser Asn Arg Ala

```

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```

62 65          70          75          80
64 tcc ggg gtc cct gac agg ttc agt ggc agt gga tca ggc aca gat ttt 288
65 Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
66          85          90          95
68 aca ctg aaa atc agc aga gtg gag gct gag gat gtt ggg gtt tat tac 336
69 Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr
70          100          105          110
72 tgc atg caa gct cga caa act cca ttc act ttc ggc cct ggg acc aaa 384
73 Cys Met Gln Ala Arg Gln Thr Pro Phe Thr Phe Gly Pro Gly Thr Lys
74          115          120          125
76 gtg gat atc aga cga act gtg gct gca cca tct gtc ttc atc ttc ccg 432
77 Val Asp Ile Arg Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro
78          130          135          140
80 cca tct gat gag cag ttg aaa tct gga act gcc tct gtt gtg tgc ctg 480
81 Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu
82 145          150          155          160
84 ctg aat aac ttc tat ccc aga gag gcc aaa gta cag tgg aag gtg gat 528
85 Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp
86          165          170          175
88 aac gcc ctc caa tcg ggt aac tcc cag gag agt gtc aca gag cag gac 576
89 Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp
90          180          185          190
92 agc aag gac agc acc tac agc ctc agc acc ctg acg ctg agc aaa 624
93 Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys
94          195          200          205
96 gca gac tac gag aaa cac aaa gtc tac gcc tgc gaa gtc acc cat cag 672
97 Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln
98          210          215          220
100 ggc ctg agc tcg ccc gtc aca aag agc ttc aac agg gga gag tgt tag 720
101 Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys *
102 225          230          235
106 <210> SEQ ID NO: 2
107 <211> LENGTH: 239
108 <212> TYPE: PRT
109 <213> ORGANISM: Artificial Sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: Light chain of CHIR-12.12 human anti-CD40 antibody
114 <400> SEQUENCE: 2
115 Met Ala Leu Pro Ala Gln Leu Leu Gly Leu Leu Met Leu Trp Val Ser
116 1          5          10          15
117 Gly Ser Ser Gly Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Thr
118          20          25          30
119 Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser
120          35          40          45
121 Leu Leu Tyr Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys
122          50          55          60
123 Pro Gly Gln Ser Pro Gln Val Leu Ile Ser Leu Gly Ser Asn Arg Ala
124 65          70          75          80
125 Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe

```

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```

126          85          90          95
127 Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr
128          100          105          110
129 Cys Met Gln Ala Arg Gln Thr Pro Phe Thr Phe Gly Pro Gly Thr Lys
130          115          120          125
131 Val Asp Ile Arg Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro
132          130          135          140
133 Pro Ser Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu
134 145          150          155          160
135 Leu Asn Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp
136          165          170          175
137 Asn Ala Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp
138          180          185          190
139 Ser Lys Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys
140          195          200          205
141 Ala Asp Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln
142          210          215          220
143 Gly Leu Ser Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
144 225          230          235
147 <210> SEQ ID NO: 3
148 <211> LENGTH: 2016
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial Sequence
152 <220> FEATURE:
153 <223> OTHER INFORMATION: Coding sequence for heavy chain of CHIR-12.12
154 human anti-CD40 antibody (with introns)
157 <400> SEQUENCE: 3
158 atggagtttg ggctgagctg ggttttcctt gttgctattt taagaggtgt ccagtgtcag 60
159 gtgcagtttg tggagtctgg gggaggcgtg gtccagcctg ggaggtccct gagactctcc 120
160 tgtgcagcct ctggattcac cttcagtagc tatggcatgc actgggtccg ccaggctcca 180
161 ggcaaggggc tggagtgggt ggcagttata tcatatgagg aaagtaatag ataccatgca 240
162 gactccgtga agggccgatt caccatctcc agagacaatt ccaagatcac gctgtatctg 300
163 caaatgaaca gcctcagaac tgaggacacg gctgtgtatt actgtgcgag agatgggggt 360
164 atagcagcac ctgggcctga ctactggggc cagggaaccc tggtcaccgt ctctcagca 420
165 agtaccaagg gcccatccgt cttccccctg gcgcccgtc gcaagagcac ctctgggggc 480
166 acagcggccc tgggctgctt ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 540
167 aactcaggcg ccctgaccag cggcgtgcac accttccccg ctgtcctaca gtctcagga 600
168 ctctactccc tcagcagcgt ggtgaccgtg cctccagca gcttgggcac ccagacctac 660
169 atctgcaacg tgaatcaca gcccagcaac accaagggtg acaagagagt tggtgagagg 720
170 ccagcacagg gagggagggt gtctgctgga agccaggctc agcgctcctg cctggacgca 780
171 tcccggctat gcagtccag tccagggcag caaggcaggc cccgtctgcc tcttcaccgc 840
172 gaggcctctg cccgccccac tcatgctcag ggagagggtc ttctggcttt tccccaggc 900
173 tctgggcagg cacaggctag gtgccctaa cccaggccct gcacacaaag gggcaggtgc 960
174 tgggctcaga cctgccaaga gccatatccg ggaggacctt gcccctgacc taagcccacc 1020
175 ccaaaggcca aactctccac tccctcagct cggacacctt ctctcctccc agattccagt 1080
176 aactcccaat cttctctctg cagagcccaa atcttgtgac aaaactcaca catgcccacc 1140
177 gtgcccaggt aagccagccc aggcctcgcc ctccagctca aggcgggaca ggtgccctag 1200
178 agtagcctgc atccaggga agggcccagc cgggtgctga cacgtccacc tccatctctt 1260
179 cctcagcacc tgaactcctg gggggaccgt cagtcttctt cttcccccca aaaccaagg 1320

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180 acaccctcat gatctcccg acccctgagg tcacatgcgt ggtggtggac gtgagccacg 1380
181 aagaccctga ggtcaagttc aactggtacg tggacggcgt ggaggtgcat aatgccaaga 1440
182 caaagccgcg ggaggagcag tacaacagca cgtaccgtgt ggtcagcgtc ctcaccgtcc 1500
183 tgcaccagga ctggctgaat ggcaaggagt acaagtgcaa ggtctccaac aaagccctcc 1560
184 cagcccccat cgagaaaacc atctccaaag ccaaagggtg gaccctggtg gtgaggggc 1620
185 cacatggaca gaggccggct cggcccaccc tctgccctga gactgaccgc tgtaccaacc 1680
186 tctgtcccta cagggcagcc ccgagaacca caggtgtaca ccctgcccc atccgggag 1740
187 gagatgacca agaaccaggt cagcctgacc tgcctggtca aaggcttcta tcccagcgac 1800
188 atcgccgtgg agtgggagag caatgggcag ccggagaaca actacaagac cagcctccc 1860
189 gtgctggact ccgacggctc cttcttcctc tatagcaagc tcaccgtgga caagagcagg 1920
190 tggcagcagg ggaacgtctt ctcagtctcc gtgatgcatg aggctctgca caaccactac 1980
191 acgcagaaga gcctctccct gtctccgggt aaatga 2016
193 <210> SEQ ID NO: 4
194 <211> LENGTH: 469
195 <212> TYPE: PRT
196 <213> ORGANISM: Artificial Sequence
198 <220> FEATURE:
199 <223> OTHER INFORMATION: Heavy chain of CHIR-12.12 human anti-CD40 antibody
201 <400> SEQUENCE: 4
202 Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Arg Gly
203 1 5 10 15
204 Val Gln Cys Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln
205 20 25 30
206 Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
207 35 40 45
208 Ser Ser Tyr Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
209 50 55 60
210 Glu Trp Val Ala Val Ile Ser Tyr Glu Glu Ser Asn Arg Tyr His Ala
211 65 70 75 80
212 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Ile
213 85 90 95
214 Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Val
215 100 105 110
216 Tyr Tyr Cys Ala Arg Asp Gly Gly Ile Ala Ala Pro Gly Pro Asp Tyr
217 115 120 125
218 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly
219 130 135 140
220 Pro Ser Val Phe Pro Leu Ala Pro Ala Ser Lys Ser Thr Ser Gly Gly
221 145 150 155 160
222 Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val
223 165 170 175
224 Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe
225 180 185 190
226 Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val
227 195 200 205
228 Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val
229 210 215 220
230 Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys
231 225 230 235 240

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```

232 Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu
233          245          250          255
234 Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
235          260          265          270
236 Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
237          275          280          285
238 Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
239          290          295          300
240 Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
241 305          310          315          320
242 Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
243          325          330          335
244 Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
245          340          345          350
246 Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
247          355          360          365
248 Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln
249          370          375          380
250 Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
251 385          390          395          400
252 Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
253          405          410          415
254 Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
255          420          425          430
256 Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
257          435          440          445
258 Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
259          450          455          460
260 Leu Ser Pro Gly Lys

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261 465

264 &lt;210&gt; SEQ ID NO: 5

265 &lt;211&gt; LENGTH: 469

266 &lt;212&gt; TYPE: PRT

267 &lt;213&gt; ORGANISM: Artificial Sequence

269 &lt;220&gt; FEATURE:

270 &lt;223&gt; OTHER INFORMATION: Heavy chain of variant of CHIR-12.12 human

271 anti-CD40 antibody

274 &lt;400&gt; SEQUENCE: 5

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275 Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Arg Gly
276 1          5          10          15
277 Val Gln Cys Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln
278          20          25          30
279 Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
280          35          40          45
281 Ser Ser Tyr Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
282          50          55          60
283 Glu Trp Val Ala Val Ile Ser Tyr Glu Glu Ser Asn Arg Tyr His Ala
284 65          70          75          80
285 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Ile

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**VERIFICATION SUMMARY**

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Input Set : A:\seq1st.txt

Output Set: N:\CRF4\05152006\J578401.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No  
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:40 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:43 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1  
L:538 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:9  
L:639 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:11